# ArcMap 9.2 DRG Tools

Introduction

The Service Center Agencies used DRG Tools extensively when the agencies were in the ArcView 3.x environment. Similar tools for ArcMap have never been developed. The National Cartography & Geospatial Center (NCGC) continues to get requests for these capabilities for ArcMap. Crude capabilities in ArcMap are available to turn on/off the symbology of the Digital Raster Graphic (DRG) TIFF images. Each image had to be manipulated individually.

ArcMap 9.x DRG Tools

The National Cartography & Geospatial Center has developed an ArcMap Toolbar that provides essential tools for turning symbology on/off; with results similar to the ArcView 3.x tools. The toolbar provides three capabilities – toggle on/off individual values in the color palette, toggle on/off individual physical and cultural features, and a tool to restore the color palette. Like the ArcView 3.x tool, the ArcMap tools will only process DRG images with a standard color palette of 0-12.
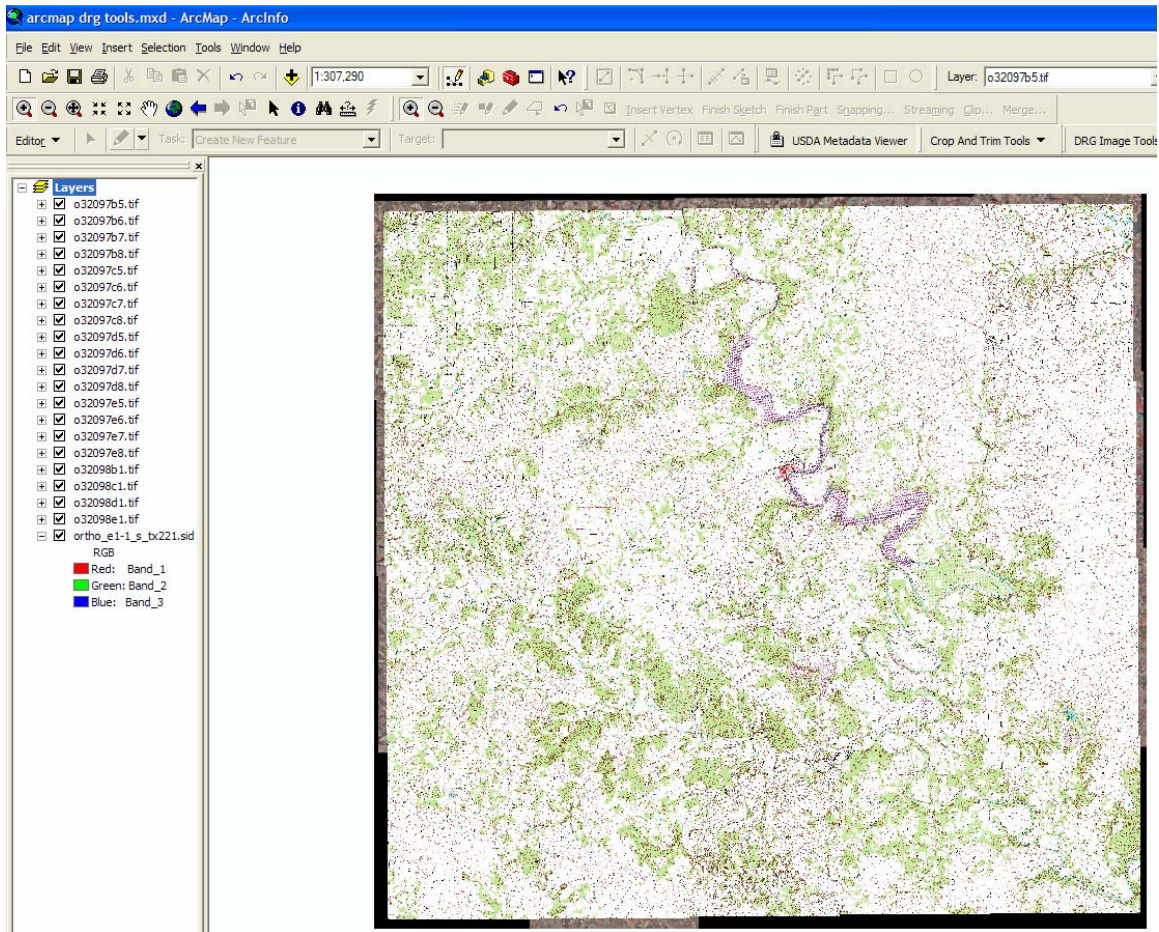
Step 1: Accessing the Tools

❑ Start ArcMap and open an empty map.

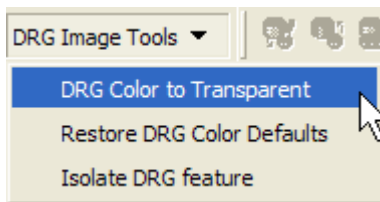❑ Click on *View>Toolbars>DRG Tools* to add the toolbar.
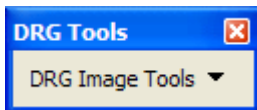
❑ Dock the toolbar at any convenient location.

❑ Add an ortho mosaic and DRG's to ArcMap with the ortho mosaic on the bottom, as shown below.



Step 2: Turning Individual Color Palettes Transparent

❑ Click on the DRG Image Tools drop-down menu and select *DRG Color to Transparent.*

The default layers to process *Just Visible DRG Layers* are only those layers checked on for display. Do not confuse them with images visible in the display window. The other option is to process *All DRG Layers*.

The DRG tools are programmed to make specific color palettes transparent or to isolate specific features as quickly as possible. The tools do not keep track of the number of pixels representing each color palette. Check the box next to *Preserve Pixel Value Counts* if you have plans to submit the layer for further processing.

❑ Check the white color palette to make it transparent and click *Apply* or *OK*. You can check on/off any number of color palettes to make transparent. Clicking *OK* closes the dialog box.
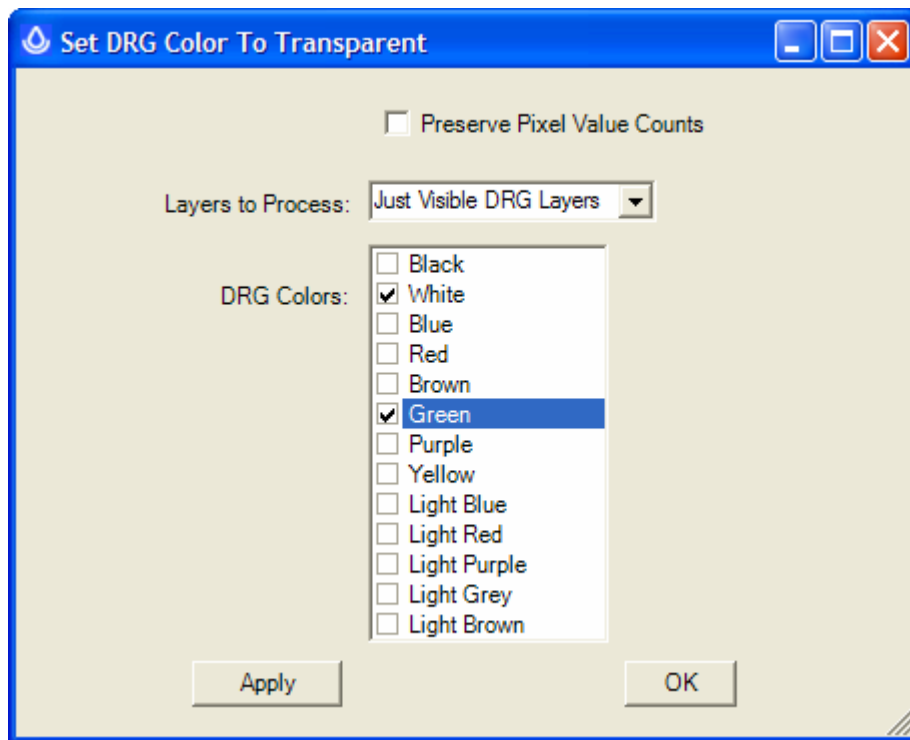
❑ Set ArcMap scale at 1:7,920. In this example Comanche Peak is near the center of the screen display.
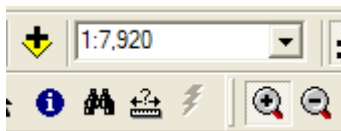
❑ Using *Pan* ![pan icon] drag the Comanche Peak feature to the middle of the display screen. Notice the Contours lines and a few water bodies are transparent over the ortho image.
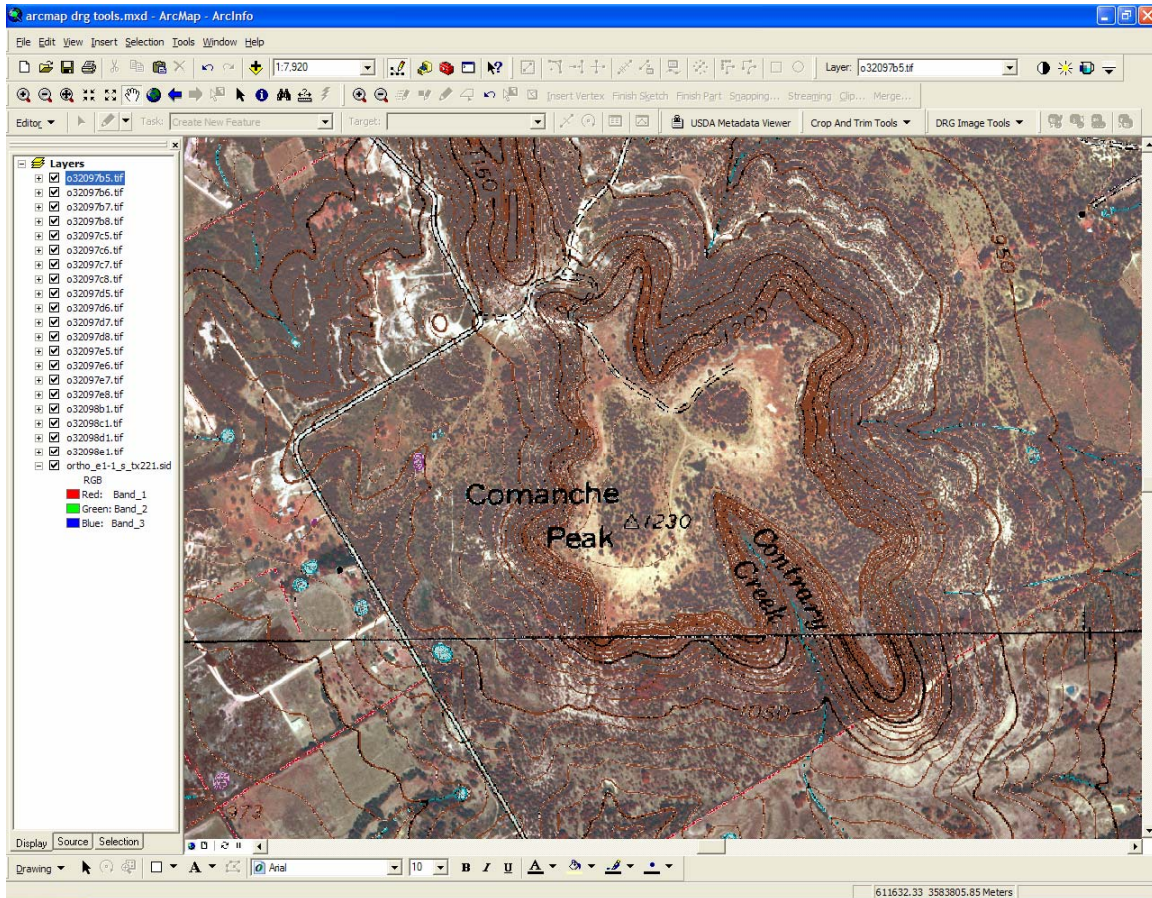
❑ Using the *DRG Color to Transparent* tool try toggling other color palettes on/off by alternatively checking one or more colors and clicking *Apply*. Click *OK* when finished.

Step 3: Restoring Color Palettes

❑ Click on the DRG Image Tools drop-down menu and select *Restore DRG Color Defaults* to restore all color palettes. Click *Reset* to execute the restoration.
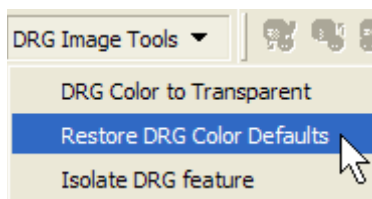
Step 4: Isolating DRG Features

❏ Click on the DRG Image Tools drop-down menu and select *Isolate DRG Feature* to all color palettes to transparent except for those colors representing features of interest, e.g., contours, vegetation, etc.
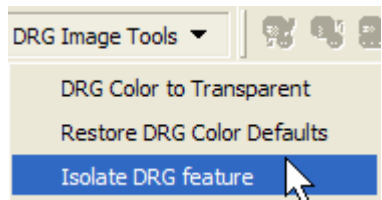
❏ Check the *Contours* and *Vegetation* features and click *Apply* or *OK*. Color palettes representing all other features in the DRGs are made transparent.
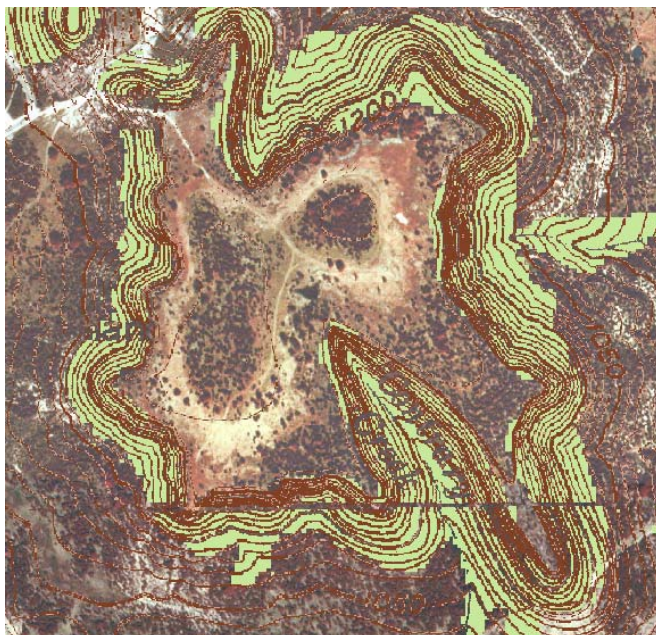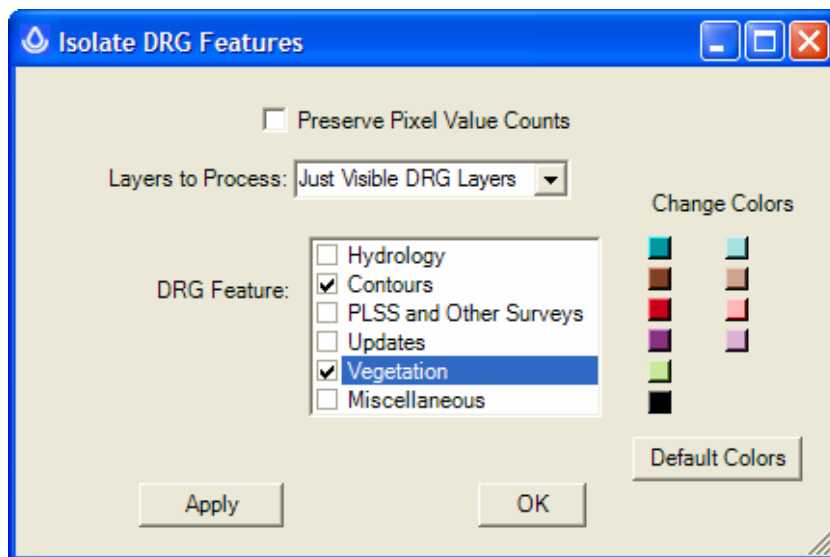
❑ Using the *Isolate DRG Feature* tool try toggling other on/off alternatively checking a feature and clicking *Apply*.

❑ Click on an individual color symbol to select a different color. Some features are represented by more than one color symbol, such as Contours. Each color symbol can be changed.
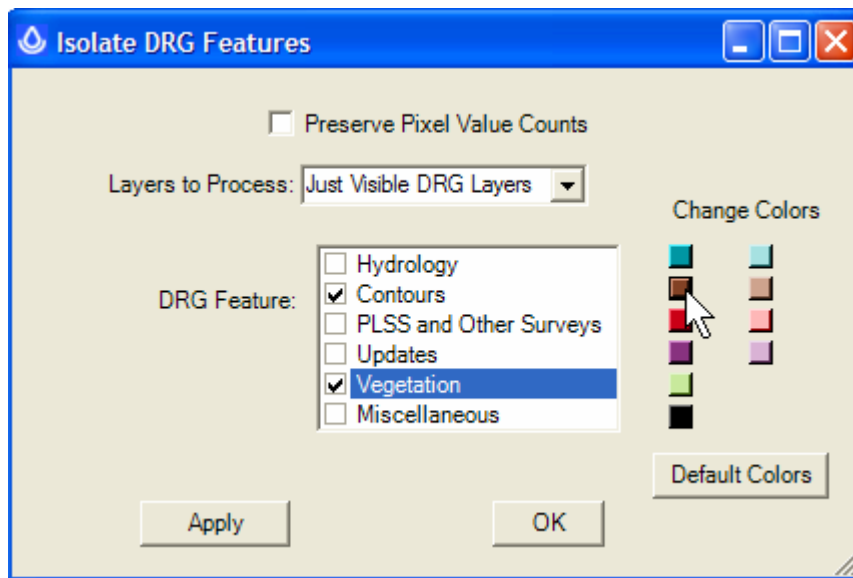
❑ Click *OK* when finished.

❑ *Pan* and *Zoom* to other areas of the image, especially towns and rivers.

❑ When finished, save the .mxd project for later use to preserve the color palettes made transparent or the isolated features.

❑ Close ArcMap.